

## **SECTION 637**

### **WATER**

#### **637.1-DESCRIPTION:**

This work shall consist of furnishing, and applying or incorporating, as the case may be, water required for compacting embankments, for stabilizing soils or other materials, as a dust palliative, or for any other specially designated purpose, in accordance with these Specifications and in accordance with the requirements of the Plans or as directed by the Engineer.

#### **637.2-MATERIALS:**

Water shall conform to the pertinent requirements set forth in these Specifications for its specific uses or, in the absence of such specific requirements for the designated use, the water shall be suitable for the purpose intended and shall be free of substances which would be deleterious to the work involved.

#### **637.3-CONSTRUCTION METHODS:**

The equipment to be used with the water operation involved will be approved by the Engineer as adequate and suitable for the purpose intended.

Water shall be incorporated in the manner, in the amounts, at the times, and for the purposes prescribed in these Specifications or as directed by the Engineer.

#### **637.4-METHOD OF MEASUREMENT:**

When the Contract includes a separate item for "Water", it will be measured by the gallon (liter), expressed in thousand-gallon (liter) units, and the quantity to be measured for payment will be the amount of water furnished and used for the purposes specifically designated as being included under the pay item. Measurements will be by means of tanks or tank trucks of predetermined capacity or by means of satisfactory and approved meters furnished by the Contractor.

When the Contract does not include a separate item for "Water", or when the Contract does include such an item and water is also furnished and used by the Contractor for purposes other than those specifically included in the item, such water not covered by a specific item will not be paid for directly but will be construed to be subsidiary work included under other Contract items.

#### **637.5-BASIS OF PAYMENT:**

The quantity, determined as provided above, will be paid for at the contract unit price bid for the item below which price and payment will be full compensation for furnishing all the material and doing all the work prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies, and incidentals necessary to complete the work.

#### **637.6-PAY ITEMS:**

ITEM	DESCRIPTION	UNIT
637001-*	WATER FOR DUST PALLIATIVE	THOUSAND GALLON (THOUSAND LITERS)

\* Sequence number

## SECTION 638

### PROJECT MARKERS, RIGHT-OF-WAY MARKERS, AND SURVEY MARKERS

#### 638.1-DESCRIPTION:

This work shall consist of furnishing, and placing or installing at the points designated on the Plans or by the Engineer, metal (signpost) project markers, right-of-way markers, and concrete survey markers, in accordance with these Specifications and in reasonably close conformity to the lines, grades, dimensions, locations, and sections shown on the Plans or established by the Engineer.

#### 638.2-MATERIALS:

Right-of-way Markers shall consist of # 6 (# 20) deformed reinforcing steel bars meeting the requirements of AASHTO M 31 and caps provided by the Division. Materials for project markers shall conform to the requirements specified on the Plans. Survey markers shall be constructed of concrete conforming to 715.12 or 715.19.

Survey Markers constructed without reinforcement shall contain sufficient steel near the top to provide magnetic detection.

## CONSTRUCTION METHODS

#### 638.3-RIGHT-OF-WAY MARKERS:

**638.3.1-Right-Of-Way Marker Installation:** Markers shall be set plumb and to a minimum depth of 36 inches (1 meter) and shall be flush to the ground. When rock is encountered in areas of proposed markers, they shall be grouted to a depth of 18 inches (0.5 meters) into the rock. Right-of-way markers shall be installed at points designating the right-of-way boundaries and at each break in the right-of-way line as shown on the Plans or as directed by the Engineer.

**638.3.2-Installation:** Markers shall be set plumb and to the depth shown on the Plans. The holes shall be backfilled with suitable material and thoroughly tamped.

Right-of-way markers shall be set at points designating the right-of-way boundaries and at each break in the right-of-way line as shown on the Plans or as directed by the Engineer. Right-of-way markers shall be accurately set to the mark given by means of intersecting strings. If approved by the Engineer, other